

SPECIFICATION AMENDMENTS

Replace the paragraph at page 8, lines 24-30 with the following paragraph:

The connection joint can contact and electrically connect the routing line and the pad. The connection joint can extend vertically beyond the chip and the routing line in the first direction, or alternatively, the connection joint can extend vertically beyond the chip, the routing line and the pillar in the second direction. The connection joint can contact the encapsulant, or alternatively, the connection joint can be spaced from the encapsulant. The connection joint can be an electroplated metal, ~~an~~and electrolessly plated metal, solder, conductive adhesive or a wire bond.

Replace the paragraph at page 30, lines 19-26 with the following paragraph:

At this stage, chip 110 and pillar 144 remain embedded in encapsulant 160. Surface 146 of pillar 144 and surface 162 of encapsulant 160 are laterally aligned with one another and exposed. Thus, an exposed planarized horizontal surface that faces upwardly includes surfaces 146 and 162. Pillar 144 and encapsulant ~~160~~¹⁴⁶ continue to extend upwardly beyond chip 110, routing line 132, insulative base 140, support 142 and adhesive 154, and encapsulant 160 continues to cover chip 110. Furthermore, pillar 144 extends through surface 162 of encapsulant 160, and encapsulant 160 no longer contacts or covers surface 146 of pillar 144.

Replace the paragraph at page 53, lines 1-9 with the following paragraph:

FIGS. 31A, 31B and 31C are cross-sectional, top and bottom views, respectively, of a semiconductor chip assembly in accordance with a thirteenth embodiment of the present invention. In the thirteen embodiment, the encapsulant is selectively etched to expose the pillar. For purposes of brevity, any description in the first embodiment is incorporated herein insofar as the same is applicable, and the same description need not be repeated. Likewise, elements of the thirteenth embodiment similar to those in the first embodiment have corresponding reference numerals indexed at thirteen-hundred rather than one-hundred. For instance, chip 1310 corresponds to chip 110, routing line 1332 corresponds to routing line 132, etc.

Replace the paragraph at page 53, lines 21-30 with the following paragraph:

Opening 1396 is formed by applying a suitable etch that is highly selective of encapsulant 1360 with respect to pillar 1344. In this instance, a selective TEA CO₂ laser etch is applied using multiple laser direct writes. The laser is directed at surface 1346 of pillar 1344. The laser has a spot size of 150 microns, and surface 1346 has a diameter of 300 microns. Furthermore, the laser direct writes are offset relative to one another yet overlap so that the laser scans a central portion of surface 1346 with a diameter of 200 microns. In this manner, the laser direct writes in combination are vertically aligned with and centered relative to surface 1346. As a result, the laser strikes pillar 1344, a portion of encapsulant 1360 that covers pillar 1344, and ablates encapsulant 1360~~1344~~.